UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,580	11/26/2003	Mitchell Clark Voges	67175523.001102	5675
23562 BAKER & MC	7590 03/05/200 KENZIE LLP	EXAMINER		
PATENT DEPARTMENT 2001 ROSS AVENUE SUITE 2300 DALLAS, TX 75201			BLAU, STEPHEN LUTHER	
			ART UNIT	PAPER NUMBER
			3711	
			MAIL DATE	DELIVERY MODE
			03/05/2009	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/722,580	VOGES ET AL.		
Office Action Summary	Examiner	Art Unit		
	Stephen L. Blau	3711		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 20 Ja	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1-4, 10-29, 40-69, 71-88 is/are pendin 4a) Of the above claim(s) 10-19,22-28,40-69,71 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4,20,21,29,79 and 87 is/are rejected 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	1 <u>-78,80-86 and 88</u> is/are withdrav	vn from consideration.		
Application Papers				
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction in the original or declaration is objected to by the Examiner.	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite		

Art Unit: 3711

#### **DETAILED ACTION**

## Request for Continued Examination (RCE)

1. The request filed on 3 November 2008 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/722,580 is acceptable and a RCE has been established. An action on the RCE follows.

#### Election/Restrictions

2. Claims 10-19, 22-28, 67-69, 71-78 and 80-86 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 20 January 2009. In further review due to selecting the species of changing the grip to modify the equipment to achieve optimal flight characteristics, it has been determined that claim 88 is directed to a different species due to instead changing loft, flanges and bounce angle to achieve optimal flight. As such claim 88 is withdrawn as well.

Art Unit: 3711

#### Response to Amendment

3. The amendment filed 3 November 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim 3 having a method step of using collected data related to a golfer's current equipment to be used to determine if a golfer's swing technique should be modified. The Examiner was not able to find this process in the originally filed application.

Applicant is required to cancel the new matter in the reply to this Office Action.

### Specification

4. With respect to optimizing equipment, the specification stands objected to under rule 1.71 of 37 C.F.R. for not being written in an exact and precise way as to enable one skilled in the art to use the same. The specification does not disclose how one skilled in the art is to specify golf equipment for optimizing equipment used for ability [028], loft [031], load time [045], load pattern [039] to [043], shaft length, shaft materials, shaft torque, shaft weight, different grips, different grip weights [060], tip size [069], head center of gravity, ball, and head type [056].

Art Unit: 3711

### Claim Objections

5. The change to claim 71 is agreed with and the objection to for informalities is removed.

### Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 7. Claims 2-4 and 20-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With respect to claim 2, it is uncertain how a golfer's ability is used to provide swing instruction to a golfer. With respect to claim 3, it is uncertain of how information collected about equipment is able to be used to determine if a golfer's swing technique should be modified. With respect to claim 4, it is uncertain shaft flex, lie angle and loft are used to determine if the golfer's swing technique should be modified. With respect to claims 20, it is uncertain how to change a grip based at least in part on collected launch data to achieve an optimal ball flight. There are no instructions/directions in the specification which show if the collected lunch data is this

Art Unit: 3711

than change to this grip. With respect to claim 21, it is uncertain how to specifying golf equipment based on the new grip with collection data related to how the golfer's swing launches a ball with the new grip.

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "collecting information related to the golfer's ability and using it to provide swing instruction to the golfer". Claim 3 recites the limitation "collecting data related to the golfer's current equipment, and using it to determine if the golfer's swing technique should be modified". The Examiner was unable to find in the specification the disclosure of these items. There is insufficient antecedent basis for these limitations in the specification.

#### Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 29 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Evans (3,792,863).

Anderson discloses a method for fitting golf equipment (title), collecting data related to the golfers swing in the form of shaft flex using sensors as strain gauges [0042], monitor how the golfer launches a golf ball using a particular club to obtain launch data in the form of using a digital camera and tracking features of a ball [0026],[0030],[0036] to obtain launch data including launch angle [0042], and changing one aspect of a golf club in order to achieve an optimum club [0050] [0051].

Anderson lacks swing data comprising a load time, load pattern, peak load, swing ramp, and ramp potential or a combination of at least some of these parameters, determining if a golfer's swing technique should be modified based at least in part on the collected swing data, when it is determined that the golfer's swing technique should be modified, then using the swing data to correct the swing flaws, when it is determined that the golfer's swing technique should not be modified, obtaining launch data of ball velocity and spin rate, changing on aspect of a club in order to change any launch angle, velocity and spin rate to achieve optimal ball flight characteristic, using captured images of a swing to provide instruction to the golfer, determining whether the load pattern of a golfer's swing includes a single crest and using the swing data to correct the flaws comprising using the swing data to determine appropriate modifications to the golfer's swing to produce an incline load pattern.

Gobush discloses swing instruction to correct swing flaws (Col. 18, Lns. 55-57) during a method of fitting of a club to a golfer (Col. 2, Lns. 29-32) using cameras (Col. 1,

Art Unit: 3711

Lns. 60-67). Evans discloses collecting swing data using strain gages (Abstract) comprising a combination of a load time, load pattern, peak load, and swing ramp (Fig. 2), a step of determining if a golfer's swing technique should be modified based at least in part on the collected swing data (Fig. 2), when it is determined that the golfer's swing technique should be modified, then using the swing data to correct the swing flaws in the form of having an instructor (Col. 4, Lns. 6-67) and also include fitting steps (Col. 4, Lns. 60-67) and determining whether the load pattern of a golfer's swing includes a single crest and using the swing data to correct the flaws comprising using the swing data to determine appropriate modifications to the golfer's swing to produce an incline load pattern (Fig. 2, Col. 4, Lns. 6-67). In view of the patents of Gobush and Evans it would have been obvious to modify the method of fitting golf equipment of Anderson to include determining if a golfer's swing technique should be modified, when it is determined that the golfer's swing technique should be modified correct the swing flaws, and when it is determined that the golfer's swing technique should not be modified continue on with the fitting procedure in order to have meaningful launch data when a golfer is swinging a club during a fitting process and in order to optimize the time of the fitting session by also improving the golfer's swing so that both an optimum swing and optimum equipment are both achieved. Some beginner golfers are not going to have a swing worth testing without a minimal amount of swing instruction prior to the testing and evaluation steps to fit a beginner golfer with a set of clubs. In view of the patent of Evans it would have been obvious to modify the method of fitting golf equipment of Anderson to have a step of collecting swing data from the shaft strain gages comprising

Art Unit: 3711

a combination of a load time, load pattern, peak load, and swing ramp, determining if a golfer's swing technique should be modified based at least in part on the collected swing data, when it is determined that the golfer's swing technique should be modified, then using the swing data to correct the swing flaws, determining whether the load pattern of a golfer's swing includes a single crest and using the swing data to correct the flaws comprising using the swing data to determine appropriate modifications to the golfer's swing to produce an incline load pattern in order to have a load on a shaft of a club which will maximize the performance of the club. In view of Gobush it would have been obvious to modify the method of fitting golf equipment of Anderson to have steps of using captured images of a swing to provide instruction to the golfer in order to be able to show the golfer his actual swing and how it needs to change during the instruction process.

Gobush discloses a method of fitting clubs (Col. 2, Lns. 29-32) using cameras (Col. 1, Lns. 60-67), obtain launch data including a launch angle, velocity and speed (Claim 21), changing on aspect of a club in order to change any launch angle, velocity and spin rate (Fig. 8, S111, Col. 19, Lns. 1-10) to achieve optimal ball flight characteristic in the form of distance (Col. 19, Lns. 11-24, S114), carry distance and directional accuracy, and being able to predict landing points based on ball velocity, flight direction and ball spin (Col. 1, Lns. 13-23) and a step of providing the ideal launch conditions for that player allowing a player to make changes and maximize distance (Col. 9, Lns. 1-6). In view of Gobush it would have been obvious to modify the method of fitting equipment of Anderson to obtain launch data of ball velocity and spin rate in

order to evaluate the performance of carry distance and directional accuracy, and being able to predict landing points based on ball velocity, flight direction and ball spin. In view of Gobush it would have been obvious to modify the method of fitting equipment of Anderson to change on aspect of a club in order to change any launch angle, velocity and spin rate to achieve optimal ball flight characteristic so that a player is using ideal launch conditions for his ability and able to use less strokes while playing a round of golf and in order to improve hitting distance.

12. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Evans (3,792,863) as applied to claims 1, 29 and 79 above, and further in view of Sayers (4,059,270).

Anderson lacks collecting information related to a golfer's ability and using the information it to provide swing instruction to the golfer when it is determined that the golfer's swing technique should be modified, collecting data on a golfer's current golf equipment and using it to determine if the golfer's swing technique should be modified, and collecting data comprises shaft flex, lie angle and loft.

Sayers discloses custom fitting clubs to golfer where a golfer has a certain ability in terms of personal timing, coordination and physical strength (Col. 1, 18-26). In view of the patent of Sayers it would have been obvious to modify the method of fitting a golfer with equipment of Anderson with the steps of determining collecting information related to a golfer's ability and using the information it to provide swing instruction to the golfer when it is determined that the golfer's swing technique should be modified in

Art Unit: 3711

order to instruct a player within a player's personal timing, coordination and physical strength ability.

Evans discloses collecting data of shaft flex related to the golfer's current equipment in the form of how the equipment performs when swung and using it to determine if the golfer's swing technique should be modified (Fig. 2). In view of the patent of Evans it would have been obvious to modify the method of fitting golf equipment of Anderson to have a step of collecting data on a golfer's current golf equipment in the form of shaft flex and use it to determine if the golfer's swing technique should be modified in order to maximize the performance of the club.

Gobush discloses collecting data related to the equipment of lie angle and loft (Table 1) and providing swing instruction to correct swing flaws (Col. 14, Lns. 59-61, Col. 18, Lns. 55-58). In view of Gobush it would have been obvious to modify the method of fitting golf equipment of Anderson to have a step of collecting data comprising lie angle and loft and providing swing instruction to correct swing flaws in order to prevent slicing, hooking or misaligned heads at impact and in order to hit a ball on a sweet spot of a head.

13. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Evans (3,792,863) as applied to claims 1, 29 and 79 above, and further in view of Pelz (5,039,098) and Engfer (5,749,792).

Art Unit: 3711

Anderson lacks changing a grip based at least in part on the collected launch data in order to achieve an optimal ball flight, collecting data related to how the golfer's swing launches a ball with the new grip and specifying equipment base on the new grip.

Pelz discloses a method of fitting a golfer with a club comprising a plurality of heads each comprising a portion of a quick disconnect, providing a plurality of shafts, each shaft comprising a mating portion of a quick disconnect system, selecting a head from a plurality of heads, selecting a shaft from a plurality of shafts, and testing the club in order to minimize the number of clubs needed to test fit clubs (Col. 1, Lns. 10-35) and in order for a variety of adjustment to the shaft and head structures to be used, tested or evaluated enabling a club to be created which ideally is suited for an individual playing characteristics (Col. 2, Lns. 1-13). Engfer discloses grips with varying sizes enabling precise adjustment for each user and each club increasing the likelihood of finding a grip which closely meets the preferences of an individual or club (Col. 2, Lns. 16-50). In view of Pelz and Enfger it would have been obvious to modify the method of fitting of Anderson to have changing a grip based at least in part on the collected launch data in order to achieve an optimal ball flight, collecting data related to how the golfer's swing launches a ball with the new grip and specifying equipment base on the new grip in order to use, test and evaluate different grips to precisely adjust for each user and each club increasing the likelihood of finding a grip which closely meets the preferences of an individual or club.

Art Unit: 3711

14. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Evans (3,792,863) as applied to claims 1, 29, and 79 above, and further in view of Boehm (6,611,792) and Miller (Golf Digest article 2002).

Anderson lacks achieving optimal ball flight characteristic comprising using a maximum ceiling height to limit launch angle, spin rate, or a combination thereof for a given velocity.

Boehm discloses matching velocity with a combination of launch angle and spin rate to achieve optimal ball flight characteristics in the form of maximum distance and control (Table 1). In view of the patent of Boehm it would have been obvious to modify the fitting method of Anderson to have a step of matching velocity with a combination of launch angle and spin rate to achieve maximum distance in order to have a club which will decrease the number of strokes required to complete a hole.

Miller discloses limiting the height of a ball flight in order to minimize the effects of the wind and minimize flying the ball into trouble (First paragraph). In view of Miller it would have been obvious to modify the method of fitting golf equipment of method of Anderson to have a step of selecting a maximum ceiling height for a golf ball trajectory and wherein matching the velocity with a combination of launch angle and spin rate is based in part on the maximum ceiling height in order to minimize the effects of the wind and minimize flying the ball into trouble.

Art Unit: 3711

13. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (2003/0008731) in view of Gobush (6,758,759) and Evans (3,792,863) as applied to claims 1, 29 and 79 above, and further in view of Naruo (2004/0033845) and Miller (Golf Digest article 2002).

Anderson lacks achieving optimal ball flight characteristic comprising using a maximum ceiling height to limit launch angle, spin rate, or a combination thereof for a given velocity.

Naruo discloses matching velocity with a combination of launch angle and spin rate to achieve maximum distance (Abstract, [0001], [0015], [0020], Fig. 3). In view of the patent of Naruo it would have been obvious to modify the fitting method of Anderson to have a step of matching velocity with a combination of launch angle and spin rate to achieve maximum distance in order to have a club which will decrease the number of strokes required to complete a hole.

Miller discloses limiting the height of a ball flight in order to minimize the effects of the wind and minimize flying the ball into trouble (First paragraph). In view of Miller it would have been obvious to modify the method of fitting golf equipment of method of Anderson to have a step of selecting a maximum ceiling height for a golf ball trajectory and wherein matching the velocity with a combination of launch angle and spin rate is based in part on the maximum ceiling height in order to minimize the effects of the wind and minimize flying the ball into trouble.

Art Unit: 3711

### Response to Arguments

21. The argument that the disclosure is enabling for teaching how to specify optimum equipment based on launch data obtained by changing these various parameters in order to obtain an optimal ball fight for a club is disagreed with. There are no directions how to change these parameters to change any of launch angle, velocity and spin rate so as to achieve an optimal ball fight characteristic for a give club. It would require undue experimentation. The argument that a quick load time would benefit from a slightly heavier shaft weight in order to more consistently and accurately deliver the head to the ball is noted. However none of this is in the specification. That argument that a flatline load pattern will benefit from specific instruction drills as well as a lighter weight shaft is also noted. Again none of this is in the specification. In fact the Examiner was unable to find the use of the term flatline in a word search relating to golf in the U.S. patent system. One skilled in the art would not know to recommend this. The argument that once optimal ball flight is achieved the desired parameter would be achieved is disagreed with. With no direction as to how to change the parameter and what to look for with the three different launch data of launch angle, velocity and spin rate the Examiner is of the opinion that there is undue experimentation required to perform this method for these parameters. The argument that paragraphs [028] to [029] describe using the golfer's ability to dictate what type of instruction is provided to a golfer is disagreed with. There are no definitive abilities that are discussed in these paragraphs and what instruction would be provided. It is uncertain how to perform this

Application/Control Number: 10/722,580

Art Unit: 3711

step. The argument that the disclosure is enabling due to paragraphs [054] to [056] clearly indicate that each parameter can be changed, through changes in the golfer's equipment, and than new launch data can be obtained until optimum ball launch conditions, i.e., speed, spin, launch angle, side spin, dispersion, etc., which lead to an optimum ball flight, is achieved as indicated by the launch data, or more specifically the ball flight characteristics derived is disagreed with. What is an optimum speed, spin, launch angle, side spin, or dispersion? The argument that Anderson in view of Gobush is improper due to Gobush not teaching how to use the information for teaching and fitting is disagreed with. Gobush discloses teaching in swing instruction to correct swing flaws (Col. 18, Lns. 55-57) during a method of fitting of a club to a golfer (Col. 2, Lns. 29-32). The argument that Gobush does not teach how to effect changes in the launch conditions except for changing a ball is disagreed with. Step S111 in figure 8 shows modifying launch conditions including ball speed (Col. 8, Lns. 55-62). Step 114 provides the ideal launch conditions for that player and allows a player to make changes and maximize distance (Col. 9, Lns. 1-6). Clearly the player's changes are to change the launch conditions to the ideal launch conditions. Clearly in the fitting process for a club this is where the club is changed to achieve these ideal launch conditions. Plus there is a loop to conduct a new test defining the operating parameters for the new club (Col. 9, Lns. 1-6). Clearly this implies a club with a difference from the first club and due to this being a method of fitting a club to a golfer one skilled in the art would see it obvious to either go to a new type of club as argued or continue the fitting process of a

Page 15

Art Unit: 3711

club already being tested but changing parameters. In addition in column 2 lines 30-31 it states that ball data can be used for club design and fitting club specifications.

#### Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen L. Blau whose telephone number is (571) 272-4406. The examiner can normally be reached on Mon - Fri 10:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on (571) 272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 3711

Primary Examiner, Art Unit 3711